

**b.) Amendments to the Specification**

Please enter the following change on page 14 of the specification.

[0053] Referring jointly to FIGS. 4 and 5, data processor 34 may be programmed to sample a substance such as blood glucose "M" times per day starting at a specific hour ( $t_M$ ) of the day. At time ( $t_M$ ) the program signals switching circuit 33 to apply voltage to the analysis unit 25 thereby creating an electrical current in the underlying skin. This causes interstitial fluid to be drawn through the skin and into the analysis unit 25 by the reverse iontophoresis process. Ions which carry a positive charge, such as ~~glucose~~ potassium ions, are drawn into collection pad 42 by the electrical current and the negative charge on the overlying electrode 44. Infrared source 47 directs infrared energy through the collection pad 42 and towards infrared detector 48. The infrared radiation includes the infrared absorption spectrum frequency range ( $\nu_1$  to  $\nu_2$ ) of the substance which is to be detected. --